



Fallen Star

by Arya Akhavan (September 2012)

Angles for R.I. = 1.540

61 + 5 girdles = 66 facets

10-fold, mirror-image symmetry

80 index

$L/W = 1.052$ $T/W = 0.242$ $U/W = 0.236$

$P/W = 0.433$ $C/W = 0.211$

$Vol./W^3 = 0.204$

PAVILION

| | | | |
|----|--------|-----------------------------------|---------------------|
| P1 | 45.07° | 80-16-32-48-64 | Cut to centrepoint. |
| G1 | 90.00° | 80-16-32-48-64 | Set stone size. |
| P2 | 41.27° | 02-14-18-30-34- 46-50-62-66-78 | Meet P1, G1 |

CROWN

| | | | |
|----|--------|---|-------------------|
| C1 | 58.33° | 80-16-32-48-64 | Set girdle width. |
| C2 | 26.34° | 02-06-10-14-18- 22-26-30-34-38- 42-46-50-54-58- 62-66-70-74-78 | Meet G1, C1 |
| C3 | 25.89° | 01-07-09-15-17- 23-25-31-33-39- 41-47-49-55-57- 63-65-71-73-79 | Meet C1, C2 |
| T | 0.00° | Table | Meet C2, C3 |

Well, I don't actually own an 80-index, so I can't cut this myself. I was just messing around, trying to see if I could create a sun shape inside a pentagon. It seems to have gone well, and has great light return and tilt brilliance. Cut in materials from feldspar to CZ (RI = 1.52 - 2.16) with no changes.

Suggested size = 8-10 mm

C:\Program Files (x86)\GemCAD\Designs (Mine)\Fallen Star.gem